Contents

VOLUME 132 (1993)

(Abstracted/Indexed in: Biol. Abstr., CABS, Chem. Abstr., Curr. Contents AB & ES, EH & S Digest, Environ. Period. Bibliogr., Excerpta Med., Focus On: Global Change, Geo Abstr., Oceanogr. Lit. Rev., PASCAL/CNRS, Selected Water Resour. Abstr.)

Editorial 1

Dietary intake of copper, chromium and zinc in Tarragona Province, Spain
M. Schuhmacher, J.L. Domingo, J.M. Llobet and J. Corbella (Barcelona, Spain) 3

Determination of chromium in blood and serum: evaluation of quality control procedures and estimation of reference values in Danish subjects
J.M. Christensen, E. Holst, J.P. Bonde and L. Knudsen (Copenhagen and Aalborg, Denmark) 11

Seasonal variations in the microbiology and chemistry of an acid mine drainage stream
S. McGinness and D.B. Johnson (Gwynedd, UK) 27

Leaded windows as a source of lead within homes
A.S. Al-Radady, B.E. Davies and M.J. French (Bradford, UK) 43

Weathering of miocene ferruginous sandstone in ancient buildings in northeastern Belgium
B. Fobe, H. Sweevers, G. Vleugels and R. Van Grieken (Antwerpen-Wilrijk, Belgium) 53

Fixation of ^{137}Cs by soils and sediments in the Esk Estuary, Cumbria, UK
K.S. Davies and G. Shaw (London and Ascot, UK) 71

Short Communication

Separation of high density minerals from soil
J. Cotter-Howells (London, UK) 93

Letters to the Editor 99

Book Reviews 101

Announcements 104

Special Issue: Chemistry and Fate of Modern Pesticides. A Collection of Papers Presented at the 3rd Workshop on Chemistry and Fate of Modern Pesticides, 4–6 September, 1991, held at the Dutch National Institute of Public Health (RIVM), Bilthoven, Netherlands)

Preface ix

Coupled chromatography in pesticide residue analysis
P. van Zoonen (Bilthoven, Netherlands) 105

A new laboratory model for studying the volatilization of pesticides under controlled conditions
R. Kubiak, T. Maurer and K.W. Eichhorn (Neustadt an der Weinstrasse, Germany) 115

Determination of the p*K* values of 2,4-dinitrophenol herbicides using UV spectroscopy
F. Heimlich and J. Nolte (Dortmund, Germany) 125

Analysis of phenoxyalkyl acid herbicides and chlorophenols by capillary zone electrophoresis
M. Aguilar, A. Farran and V. Martí (Barcelona, Spain) 133

GC/MS of methylated phenoxyalkanoic acid herbicides
J. Nolte, H. Mayer, M.A. Khalifa and M. Linscheid (Dortmund, Germany; Tanta, Egypt) 141

Fragmentation of organophosphorus compounds under electron impact I
Z. Moldovan, M. Culea, N. Palibroda, R. Popescu, V. Muresan and O. Musat (Cluj-Napoca, Romania) 147
Residual herbicide movement in soil columns
D.G. de Barreda, M. Gamón, E. Lorenzo and A. Saez (Moncada and Valencia, Spain) ... 155
Pesticide leaching in heterogeneous soils with oscillating flow: approximations
S.E.A.T.M. van der Zee and J.J.T.I. Boesten (Wageningen, Netherlands) 167
Degradation of pesticides in soil: comparison of laboratory experiments in a biometer system and outdoor lysimeter experiments
H. Rüdel, S. Schmidt, W. Kördel and W. Klein (Schmallenberg, Germany) 181
Fate of the new sulfonylurea amidosulfuron in soil
G. Fent, R. Kubiak and K.W. Eichhorn (Neustadt an der Weinstrasse, Germany) 201
Tricyclazol retention by soils
I. Roldan, M.C. Hermosín and J. Cornejo (Seville, Spain) 217
Degradation and adsorption of ^{14}C-mecoprop (MCPP) in surface soils and in subsoil. Influence of temperature, moisture content, sterilization and concentration on degradation
A. Helweg (Slagelse, Denmark) 229
Analysis of several pesticides along the unsaturated zone in an experimental citrus grove of Castellon (Spain)
J. Beltran, F. Hernandez, I. Morell, P. Navarrete and E. Aroca (Castellon and Madrid, Spain) 243
Analysis of chlorophenoxy acids and other acidic contaminants in food crops
J. Hajšlová, W.H. Tahtah, Z. Jehličková, V. Kocourek and P. Cuhra (Prague, Czechoslovakia) 259
Pesticide residues in food in Switzerland
C.A. Corvi and J. Vogel (Geneva, Switzerland) 275
Determination of aquatic photodegradation products of selected pesticides by gas chromatography-mass spectrometry and liquid chromatography-mass spectrometry
D. Barceló, G. Durand, N. de Bertrand and J. Albaigés (Barcelona, Spain) 283
Study of multi-residue methods for the determination of selected pesticides in groundwater
F. Hernandez, J. Beltran and J.V. Sancho (Castellon, Spain) 297
Speciation and partitioning of atrazine and gamma-hexachlorocyclohexane in estuarine waters
S.C. Apte and H.R. Rogers (Marlow, UK) 313
Monitoring of trace-levels of herbicides and their degradation products in the river Rhône, France, by gas chromatography-mass spectrometry
J. Tronczynski, C. Munschy, G. Durand and D. Barceló (Nantes, France; Barcelona, Spain) 327
The fate of triazine pesticides in River Po water
A. Brambilla, B. Rindone, S. Polesello, S. Galassi and R. Balestrini (Milan, Italy) 339
Determination of phenoxyacid herbicides in drinking water at the ppt-level by liquid chromatography and on-line selective preconcentration
V. Coquart and M.-C. Hennion (Paris, France) 349
Fate of pendimethalin, carbofuran and diazinon under abiotic and biotic conditions
I. Scheunert, M. Mansour, U. Dörfler and R. Schroll (Neuherberg and Freising-Attaching, Germany) 361
Mutagenic and carcinogenic pesticides used in the agricultural environment of Gaza Strip
J.M. Safi, Y.Z. El-Nahhal, S.A. Soliman and A.H. El-Sebae (West Bank; Gaza Strip; Alexandria, Egypt) 371
Direct injection onto the HPLC column for monitoring the behaviour of xenobiotics in biological media. II. Behaviour of cymoxanil in fungus and locust and of E-destruxin in locust
J.-C. Cherton, C. Loutelier, C. Lange and P. Cassier (Paris, France) 381
The use of biological methods for pesticide monitoring
S. Galassi, M. Mingazzini and M. Battegazzore (Milan and Parma, Italy) 399
Pesticide testing by enzyme immunoassay at trace levels in environmental and agricultural samples
B.S. Ferguson, D.E. Kelsey, T.S. Fan and R.J. Bushway (Scarborough and Orono, ME) .. 415
Cytotoxic effect of atrazine on murine B-lymphocytes in vitro
M. Böcher, T. Böldicke and F. Sasse (Braunschweig, Germany) 429

Optimization of a monoclonal antibody-based enzyme immunoassay for the detection of terbuthylazine
T. Giersch, K. Kramer and B. Hock (Freising, Germany) 435

Author Index 449
Subject Index 451
Contents (Volume 132, 1993) 457